HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Images in Clinical Hematology

Disseminated histoplasmosis diagnosed in a bone marrow sample

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Histoplasmosis is a fungal infection caused by a dimorphic fungus *Histoplasma capsulatum*.[1] Progressive disseminated histoplasmosis (PDH) is an AIDS-defining illness with a high lethality rate if not promptly treated.[3] In patients with disseminated disease, culture and pathology are the most sensitive.[2] The gold standard for the identification of the pathogen is the culture demonstrating the thermal dimorphism of the fungus.[3] We present a case of a 52 year old male with HIV-1 infection (CDC-C3) and a recent trip to Brasil, admitted in the ICU with a diagnosis of *Pneumocystis jirovecii* pneumonia (under co-trimoxazole treatment) and haemophagocytic lymphohistiocytosis. A bone marrow (BM) aspirate was performed and stained May-Grunwald-Giemsa films revealed numerous yeast-like bodies inside and outside macrophages with morphology suggestive of *Histoplasma spp* (Figure 1 and 2). Culture *and* molecular results (bone marrow PCR) confirmed the microbiological diagnosis- *Histoplasma capsulatum*.

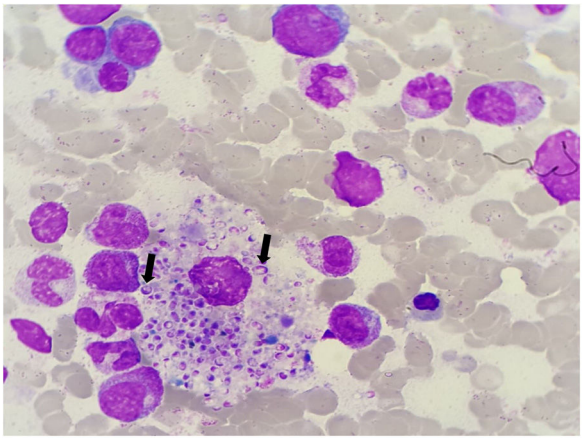

Figure 1 – BM aspirate: numerous yeast-like bodies inside macrophages (arrows) with morphology suggestive of *Histoplasma* spp.

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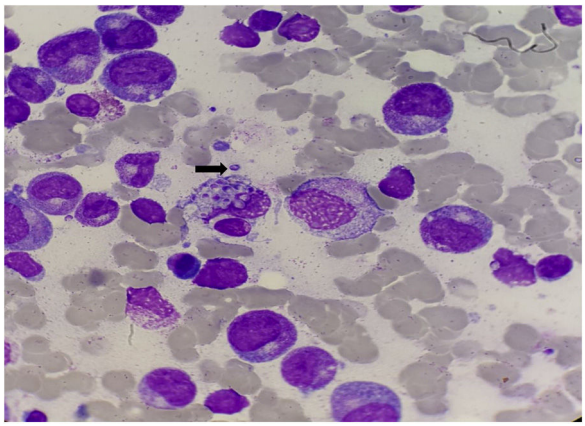

Figure 2 – BM aspirate: yeast-like bodies outside macrophages (arrow) with morphology suggestive of *Histoplasma* spp.

Conflicts of interest

The author declares no conflicts of interest.

REFERENCES

1. Fakhfakh N, Abdelmlak R, Aissa S, Kallel A, Boudawara Y, Bel Hadj S, et al. Disseminated histoplasmosis diagnosed in the bone marrow of an HIV-infected patient: First case imported in Tunisia. J Mycol Med. 2018;28(1):211–4.
2. Hill Ev, Cavuoti D, Luu Hs, McElvania TeKippe E. The Brief Case: Disseminated Histoplasma capsulatum in a Patient with Newly Diagnosed HIV Infection/AIDS. J Clin Microbiol. 2018;56(Feb (3)):e00905–17.
3. Zanotti P, Chirico C, Gulletta M, Ardighieri L, Casari S, Roldan EQ, et al. Disseminated Histoplasmosis as AIDS-presentation. Case Report and Comprehensive Review of Current Literature. Mediterr J Hematol Infect Dis. 2018;10(1):e2018040.